Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. - 22. (Cancelled)

23. (Original) A method for preventing or inhibiting neuronal degeneration, or for promoting nerve regeneration, in the central nervous system (CNS) or peripheral nervous system (PNS), which comprises administering to an individual in need thereof an effective amount of antigen-presenting cells that have been pulsed with an agent selected from the group consisting of:

(a) a nervous system (NS)-specific antigen or an analog thereof;

(b) a peptide derived from an NS specific antigen or from an analog thereof, or an analog or derivative of said peptide;

(c) a copolymer selected from the group consisting of Copolymer 1, a Copolymer 1-related peptide or polypeptide, and poly-$Glu^{50}Tyr^{50}$; and

(d) a non-self antigen.

24. (Original) A method according to claim 23, wherein said antigen-presenting cells are human antigen-presenting cells.

25. (Original) A method according to claim 24, wherein said antigen-presenting cells are selected from the group consisting of monocytes, macrophages, dendritic cells and B cells.

26. (Original) A method according to claim 25, wherein said antigen-presenting cells are autologous dendritic cells obtained from the individual in need.

27. (Original) The method according to claim 26, in which the dendritic cells were obtained from skin, spleen,

thymus, bone marrow, lymph nodes or peripheral blood of said individual.

28. (Original) A method according to claim 23, wherein said antigen-presenting cells have been cultured in a medium containing at least one stimulatory biologically active agent selected from the group consisting of transforming growth factor-beta (TGF-β), β-interferon (IFN-β), IFN-γ, tumor necrosis factor-α (TNF-α), interleukin 2 (IL-2), IL-3, IL-4, IL-6, IL-10, monocyte chemotactic and activating factor (MCAF), granulocyte colony stimulating factor (G-CSF), macrophage colony stimulating factor (M-CSF), granulocyte-macrophage colony stimulating factor (GM-CSF), colony stimulating factor 1 (CSF-1), neurotrophic factor 3 (NT-3), nerve growth factor (NGF), brain-derived neurotrophic factor (BDNF), lipid A, the tripeptide fMet-Leu-Phe (Fmlp), muramyl dipeptide (MDP), the ionophore A23187, vitamin D3-binding protein, CD40 ligand and lipopolysaccharide (LPS).

29. (Original) A method according to claim 28, wherein said antigen-presenting cells have been cultured in a medium containing IL-4, GM-CSF, or both IL-4 and GM-CSF.

30. (Original) The method according to claim 29, wherein said antigen-presenting cells are human dendritic cells that have been cultured in a medium containing both IL-4 and GM-CSF.

31. (Original) A method for treatment of an injury, disorder or disease of the CNS or PNS, which comprises administering to an individual in need thereof an effective amount of antigen-presenting cells that have been pulsed with an agent selected from the group consisting of:

(a) a nervous system (NS)-specific antigen or an analog thereof;

(b) a peptide derived from an NS-specific antigen or from an analog thereof, or an analog or derivative of said peptide;

(c) a copolymer selected from the group consisting of Copolymer 1, a Copolymer 1-related peptide or polypeptide, and poly-$Glu^{50}Tyr^{50}$; and

(d) a non-self antigen.

32. (Original) A method according to claim 31, wherein the injury in the CNS is spinal cord injury, blunt trauma, penetrating trauma, brain coup or contrecoup, hemorrhagic stroke, or ischemic stroke.

33. (Original) A method according to claim 31, wherein the disorder or disease is diabetic neuropathy, senile dementia, Alzheimer's disease, Parkinson's disease, facial nerve (Bell's) palsy, Huntington's chorea, amyotrophic lateral sclerosis (ALS), vitamin deficiency, epilepsy, amnesia, anxiety, hyperalgesia, psychosis, seizures, oxidative stress, opiate tolerance and dependence, glaucoma, optic neuropathy, age-related macular degeneration or retinal degeneration.

34. (Original) A method according to claim 31 wherein said antigen presenting cells are administered locally at or near the site of injury,

35. (Original) A method according to claim 31 wherein said antigen presenting cells are administered sistemically

36. (Original) A method for treatment of spinal cord injury, which comprises administering to an individual in need thereof an effective amount of autologous dendritic cells that have been pulsed with an agent selected from the group consisting of:

(a) a nervous system (NS)-specific antigen or an analog thereof;

(b) a peptide derived from an NS-specific antigen or from an analog thereof, or an analog or derivative of said peptide;

(c) a copolymer selected from the group consisting of Copolymer 1, a Copolymer 1-related peptide or polypeptide, and poly-$Glu^{50}Tyr^{50}$; and

(d) a non-self antigen.

37. (Original) The method according to claim 36 wherein said autologous dendritic cells have been cultured in a medium comprising GM-CSF and IL-4 and then pulsed with the peptide of SEQ ID NO: 4.

38. (Original) A method for treatment of an injury of the CNS or PNS, which comprises immunizing an individual in need thereof with a non-self-antigen and thereafter administering to said individual at the injury site an effective amount of antigen-presenting cells that have been pulsed with said non-self antigen.

39. (Original) A method for treatment of an injury of the CNS or PNS, which comprises administering to an

individual in need at the injury site an effective amount of antigen-presenting cells that have been pulsed with a non-self antigen, wherein said individual is an individual that has been exposed previously to said non-self antigen.